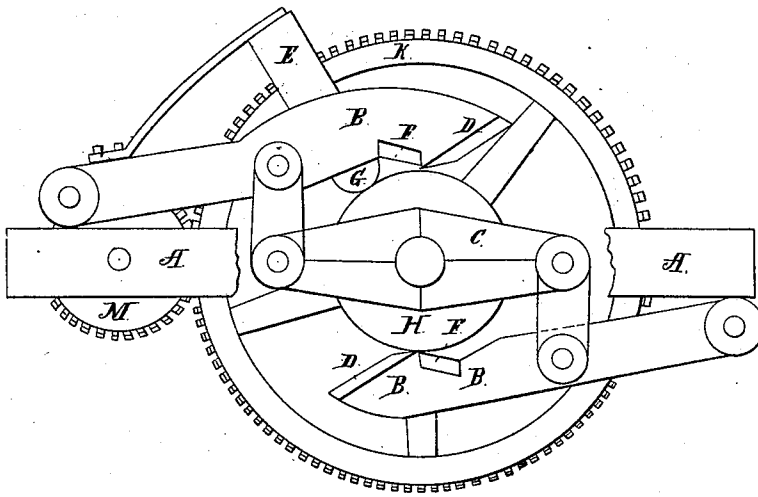
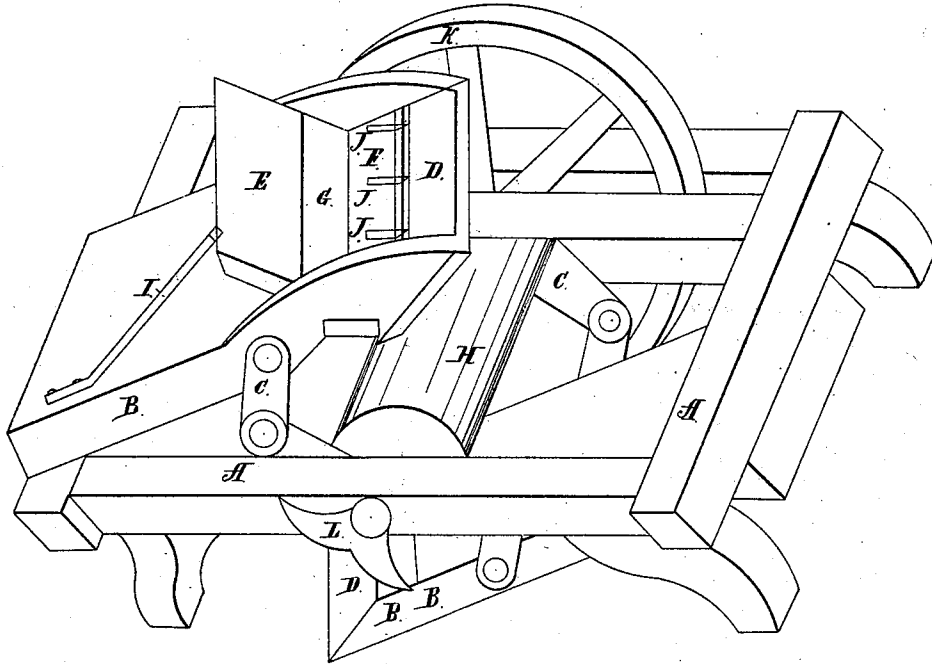


W. Steele,  
Cutting Veneers.

N<sup>o</sup> 101,782.

Patented Apr. 12, 1870.



Witnesses  
J. C. Cooke.  
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# United States Patent Office.

WILLIAM STEELE, OF SISTERSVILLE, WEST VIRGINIA.

Letters Patent No. 101,782, dated April 12, 1870.

## IMPROVEMENT IN VENEER-CUTTERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, WILLIAM STEELE, of Sistersville, in the county of Tyler and State of West Virginia, have invented certain Improvements in Machinery for Cutting Light Lumber, such as shingles, staves, and backing for looking-glass and picture-frames, from the log, of which machine the following is a specification.

### *Nature and Object of the Invention.*

The first part of my invention relates to the combining and attaching cutting-knives, measuring-rollers, and dividing-cutters, to self-adjusting frames, in such a manner that the weight of said frames alone will hold the knives, cutter, and roller in position to cut the lumber to the desired length and width as it comes from the log.

The second part of my invention relates to the adjusting a knife on each side of the log, so that, in cutting lumber of unequal thickness, such as shingles, the uniform diameter of the log will be maintained.

### *Description of the Accompanying Drawings.*

Figure 1 is a perspective of my invention showing the different parts.

Figure 2 is a longitudinal section of the same.

Like letters represent like parts in the different figures.

### *General Description.*

The working parts of my machine are supported by the wooden frame A A.

The knife-frame B, to which are attached the cutting-knife D, the bearing-bar F, and the roller-frame E, is hinged on the upper side of the frame A A, and the knife-frame B B is hinged to the under side of said frame A A, so that the knives D and D come in contact with the log on opposite sides, and parallel with each other.

The knife-frames B and B B are coupled together by the balance-yokes C and C, one of said yokes being pivoted on the shaft of the spur-wheel K, and the other on the tightening-screw L.

As the knife-frame B descends, its weight, acting on the yokes C and C, brings the knife-frame B B up with an equal and uniform pressure to the log.

F is the bearing-bar, which rests upon the log H, parallel with the edge of the cutting-knife D, and is secured at each end by means of bolts to the frame B. It is adjustable by means of set-screws or thin metallic backing, so as to regulate the cutting-depth of the knife D and secure the uniform thickness of the lumber.

E is the roller-frame, which works through slots in the sides of the knife-frame B.

By means of the spring I, one end of which is bolted to the knife-frame B the other end resting on the roller-frame E, the roller G, provided with adjustable knives for cutting lumber to any required width, is pressed down to the surface of the log H.

As the log H is revolved by means of the gearing represented by the spur-wheel K and the pinion M, the roller G is also revolved by its friction upon the log H, and its knives, by the action of the spring I, forced into the face of the log H to the required depth.

The dividing-cutters J J J are made fast in vertical slots in the bearing-bar F, and, penetrating into the surface of the log H, cut in the line of motion and separate the timber into the desired length.

In working, the log is centered on the end of the shaft of the spur-wheel K, and secured in position by the tightening-screw L.

Motion is given by the gearing, composed of pinion M and spur-wheel K, actuated by suitable pulleys.

As the log revolves the knives are brought in contact with it, cutting off shingles or staves, as may be desired.

By taking out the roller G and the scoring-knives J J J, the lumber may be run out in one continuous sheet or volute.

To cut shingles, one end of the bearing-bar is raised to the proper angle for the butt or thick end of the shingle, the other end of the bar to the proper angle for the thin end or top of the shingle, reversing the adjustment of the ends of the bearing-bar on the under knife-frame B B, thus preserving a uniform diameter to the log.

In cutting lumber of uniform thickness, one or both knife-frames may be used without affecting the good working of the machine.

### *Claim.*

I claim as my invention the self-adjusting frame B, in combination with the bearing-bar F, knife D, measuring-roller G, and dividing-cutters J J J, substantially as described, and for the purpose set forth.

Also, the frame B B with its knife and bearing-bar as connected with the frame B by means of the balance-yokes C C or their equivalents, substantially as described and for the purpose set forth.

WM. STEELE.

Witnesses:

WM. MARTIN,  
J. C. COOKE.